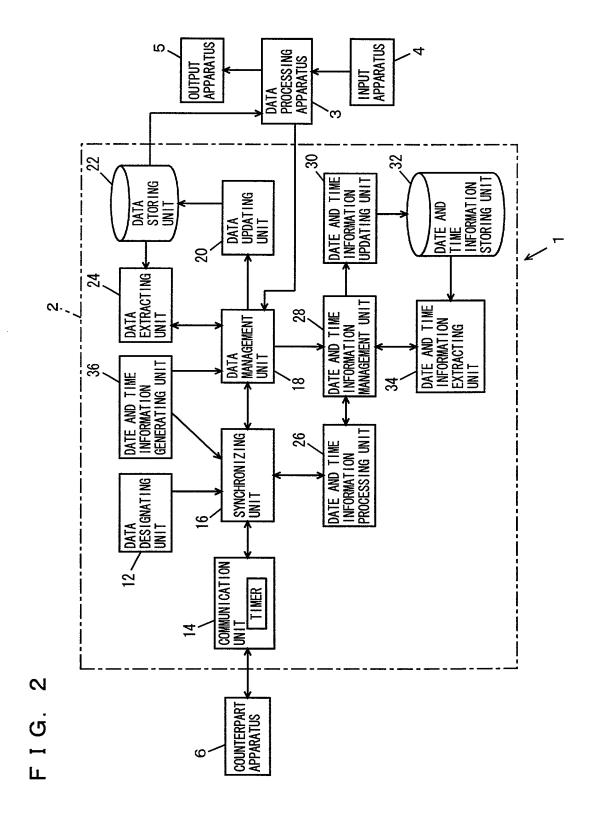
FIG. 1

T 1MC	DBOCEC	APPARATUS A	US A	APPARATUS B	TUS B	APPARATUS C	ns c
		DATA	UPDATE INFORMATION	DATA	UPDATE INFORMATION	DATA	UPDATE INFORMATION
t0		$\alpha 0 (t0, t0)$	0	α0(t0, t0)	0	$\alpha$ 0 (t0, t0)	1
£1	UPDATE $lpha$ in apparatus $c$		0		0	α1 (t0, t1)	1
t2	UPDATE α IN APPARATUS A	α2(t0, t2)	×		0		l
t3	SYNCHRONIZE BETWEEN APPARATUSES A AND B		0	α2(t0, t2)	0		
t4	SYNCHRONIZE BETWEEN APPARATUSES A AND C		0		0	α1(t0, t1)	l
	RESULT	$\alpha 2 (t0, t2)$	0	$\alpha 2 (t0, t2)$	0	α1(t0, t1)	1



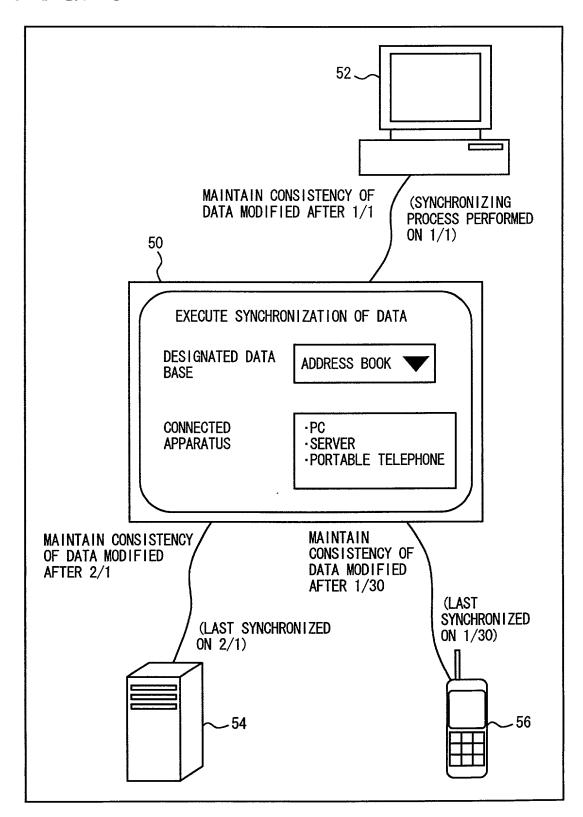
## F I G. 3

DATA BASE	DATA	DATE AND TIME	DATE AND TIME	DATE AND TIME
TYPE	NUMBER	OF NEW CREATION	OF UPDATING	OF DELETION
ADDRESS BOOK	1	2000/01/01 00:01:23	2000/01/02 00:12:34	-
ADDRESS BOOK	2	2000/02/02 12:34:56	_	2000/02/22 21:10:00
SCHEDULE	1	2000/02/01	2000/02:02	2000/02/03
BOOK		12:59:59	10:00:00	15:23:46

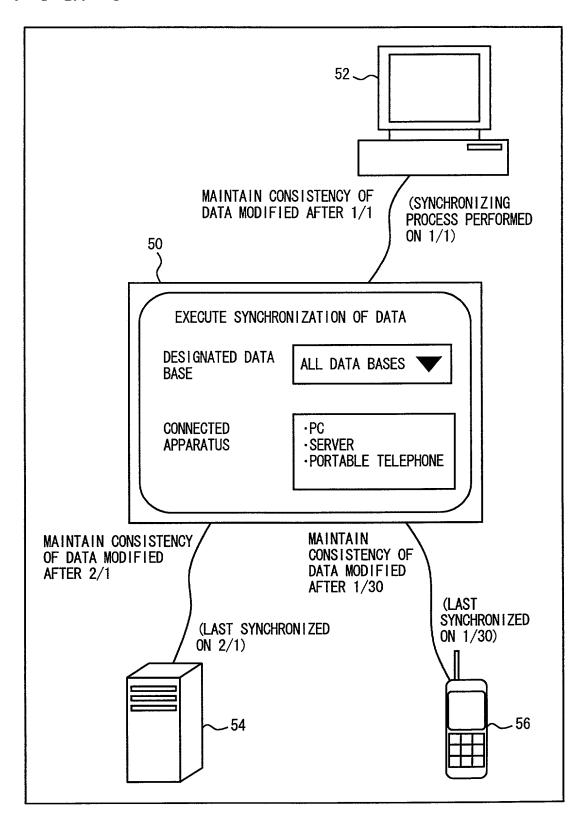
## F I G. 4

APPARATUS NUMBER	APPARATUS IDENTIFICATION NUMBER	APPARATUS NAME	APPARATUS INFORMATION	DATA BASE TIME	DATE AND TIME OF SYNCHRONIZING PROCESS
1	123. 456. 789	PERSONAL PORTABLE TELEPHONE	PORTABLE TELEPHONE	ADDRESS BOOK	2000/01/01 00:01:23
2	000. 111. 222	OFFICE PC	PC	ADDRESS BOOK	2000/02/02 12:34:56
3	987. 654. 321	OFFICE SERVER	SERVER	SCHEDULE BOOK	2000/02/02 12:59:59

F I G. 5



F I G. 6



F I G. 7

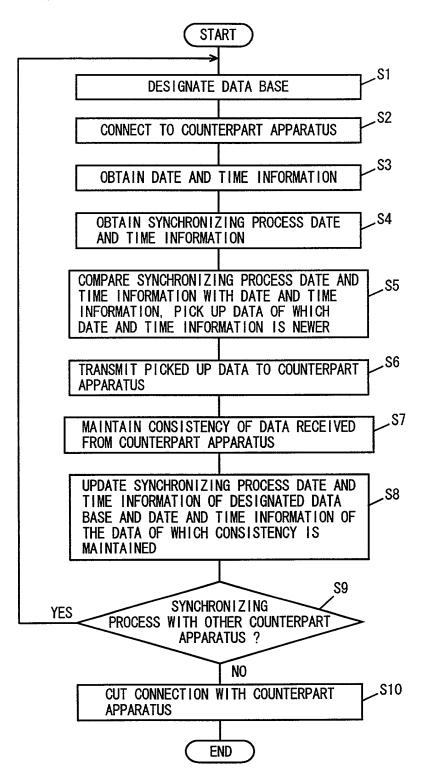
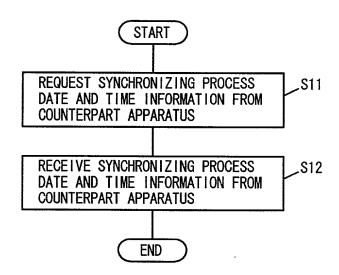
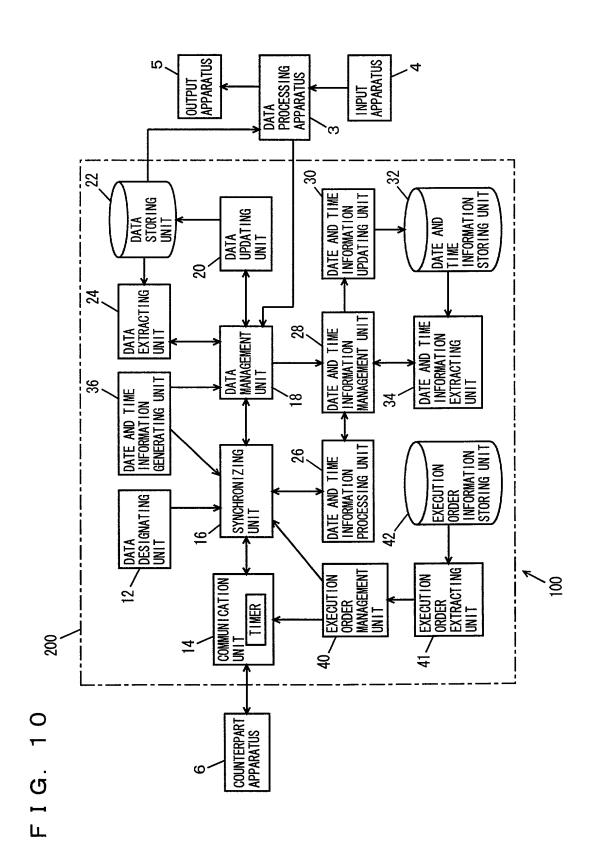


FIG. 8



F I G. 9

1	SSECORD		APPARATUS A		APPARATUS B	APPARATUS C
		DATA	TIME POINT SYNCHRONIZI	TIME POINT OF LAST SYNCHRONIZING PROCESS	DATA	DATA
			A – B	A – C		
t)	NEWLY GREATE DATA α IN APPARATUS A	α0(t0, t0)		1		1
두	SYNCHRONIZING PROCESS BETWEEN APPARATUSES A AND B	lpha0(t0, t0)			$\alpha$ 0(t0, t0)	
t2	SYNCHRONIZING PROCESS BETWEEN APPARATUSES A AND C	$\alpha$ 0(t0, t0)	t1	1	$\alpha$ 0(t0, t0)	$\alpha$ 0(t0,t0)
t3	UPDATE $lpha$ in apparatus c	$\alpha$ 0(t0, t0)	t1	t2	α0(t0, t0)	$\alpha$ 1(t0,t3)
t4	UPDATE $lpha$ in apparatus a	α2(t0, t4)	t1	t2	$\alpha$ 0(t0, t0)	$\alpha$ 1(t0,t3)
<del>t</del> 5	SYNCHRONIZING PROCESS BETWEEN APPARATUSES A AND B	$\alpha 2 (t0, t4)$	t1	t2	α2(t0, t4)	α1 (t0, t3)
te te	SYNCHRONIZING PROCESS BETWEEN APPARATUSES A AND C	α2(t0, t4)	<b>t</b> 5	t2	$\alpha 2 (t0, t4)$	$\alpha$ 2(t0,t4)
	RESULT	$\alpha 2 (t0, t4)$	t5	t6	$\alpha$ 2(t0, t4)	$\alpha 2 (t0, t4)$



## FIG. 11

NUMBER	APPARATUS IDENTIFICATION NUMBER	APPARATUS NAME	EXECUTION ORDER INFORMATION
1	123. 456. 789	PERSONAL PORTABLE TELEPHONE	1
2	000. 111. 222	OFFICE PC	3
3	987. 654. 321	OFFICE SERVER	2

FIG. 12

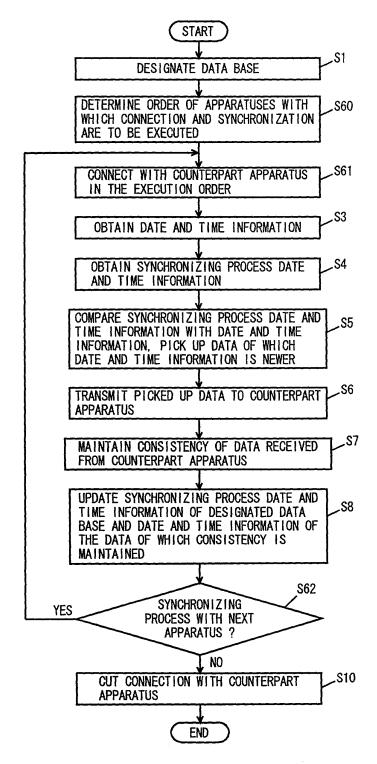


FIG. 13

		APPARATUS A	TUS A			APPARATUS B	TUS B	APPARA	APPARATUS C	APPARATUS	ATUS D
PROCESS	DATA		LAST (	LAST SYNCHRONIZING PROCESS TIME	IZING	DATA		DATA		DATA	
	DATA $\alpha$	DATA B	A - B	A - C	A - D	DATA $\alpha$	DATA B	DATA $\alpha$	DATA B	DATA $\alpha$	DATA B
NEWLY CREATE DATA α IN APPARATUS A	α0(t0, t0)	ı	_	ı	ı	-	Ţ		1		ı
NEWLY CREATE DATA $eta$ In apparatus B	$\alpha 0 (t0, t0)$	ı	ı	i	l		β0(t1, t1)	1	1	1	
SYNCHRONIZING PROCESS BETWEEN APPARATUSES A AND B	$\alpha$ 0(t0,t0)	β0(t1, t1)	<b>t</b> 2	ı	1	α0(t0, t0)	β0(t1, t1)	-	1	ı	1
SYNCHRONIZING PROCESS BETWEEN APPARATUSES A AND C	$\alpha 0$ (t0, t0)	β0(t1, t1)	t2	t3		$\alpha$ 0(t0, t0)	β0(t1, t1)	α0(t0, t0)	β0(t1, t1)	-	1
SYNCHRONIZING PROCESS BETWEEN APPARATUSES A AND D	$\alpha$ 0(t0, t0)	β0(t1, t1)	<b>t</b> 2	t3	<b>t</b> 4	$\alpha$ 0(t0, t0)	β0(t1, t1)	α0(t0, t0)	β0(t1, t1)	α0(t0, t0)	β0(t1, t1)
UPDATE $lpha$ in apparatus $c$	$\alpha 0$ (t0, t0)	$\beta$ 0(t1, t1)	<b>t</b> 2	t3	t4	α0(t0, t0)	β0(t1, t1)	α1 (t0, t5)	β0(t1, t1)	α0(t0,t0)	β0(t1, t1)
UPDATE $lpha$ in Apparatus A	$\alpha 2$ (t0, t6)	B0(t1, t1)	t2	t3	<b>t</b> 4	$\alpha 0 (t0, t0)$	$\alpha 0(t0, t0) \beta 0(t1, t1)$	α1 (t0, t5)	β0(t1, t1)	α0(t0,t0)	β0(t1, t1)
ZING PROCESS PPARATUSES A AND B	α2(t0, t6)	β0(t1, t1)	t2	t3	<b>t4</b>	α2(t0, t6)	β0(t1, t1)	α1 (t0, t5)	β0(t1, t1)	α0(t0, t0)	β0(t1, t1)
ZING PROCESS PPARATUSES A AND C	α2(t0, t6)	β0(t1, t1)	t6	ಚ	<b>t</b> 4	α2(t0, t6)	β0(t1, t1)	α2(t0, t6)	β0(t1, t1)	α0(t0, t0)	β0(t1, t1)
ZING PROCESS PPARATUSES A AND D	α2(t0, t6)	β0(t1, t1)	t6	\$2	£4	α2(t0, t6)	β0(t1, t1)	α2(t0, t6)	β0(t1, t1)	α2(t0, t6)	β0(t1, t1)
SULT	$\alpha 2$ (t0, t6)	β0(t1, t1)	t6	t8	t9	α2(t0, t6)	β0(t1, t1)	α2(t0, t6)	β0(t1, t1)	$\alpha 2 (t0, t6)$	β0(t1, t1)
におにおにちに出し	SYNCHRON I ZING PROCESS BETWEEN APPARATUSES A AND B SYNCHRON ZING PROCESS BETWEEN APPARATUSES A AND C SYNCHRON ZING PROCESS BETWEEN APPARATUSES A AND D RESULT	AND B $\alpha^2$ (10, AND C $\alpha^2$ (10, AND D $\alpha^2$ (10, $\alpha^2$ (10) $\alpha^2$ (10, $\alpha^2$ (10)	AND B $\alpha^{2}(t0, t6)$ AND C $\alpha^{2}(t0, t6)$ AND D $\alpha^{2}(t0, t6)$ $\alpha^{2}(t0, t6)$	AND B $\alpha 2 (t0, t6) \beta 0 (t1, t1)$ AND C $\alpha 2 (t0, t6) \beta 0 (t1, t1)$ AND D $\alpha 2 (t0, t6) \beta 0 (t1, t1)$ $\alpha 2 (t0, t6) \beta 0 (t1, t1)$	AND B $\alpha 2(t0, t6)$ $\beta 0(t1, t1)$ t2 AND C $\alpha 2(t0, t6)$ $\beta 0(t1, t1)$ t6 AND D $\alpha 2(t0, t6)$ $\beta 0(t1, t1)$ t6 $\alpha 2(t0, t6)$ $\beta 0(t1, t1)$ t6	AND B $\alpha 2 (t0, t6) \beta 0 (t1, t1)$ t2 t3	AND B $\alpha 2$ (t0, t6) $\beta$ 0(t1, t1)         t2         t3         t4 $\alpha$ 2(t0, t6)           AND C $\alpha$ 2(t0, t6) $\beta$ 0(t1, t1)         t6         t3         t4 $\alpha$ 2(t0, t6)           AND D $\alpha$ 2(t0, t6) $\beta$ 0(t1, t1)         t6         t8         t4 $\alpha$ 2(t0, t6) $\alpha$ 2(t0, t6) $\beta$ 0(t1, t1)         t6         t8         t9 $\alpha$ 2(t0, t6)	AND B $\alpha 2$ (t0, t6) $\beta 0$ (t1, t1)         t2         t3         t4 $\alpha 2$ (t0, t6) $\beta 0$ (t1, t1)           AND C $\alpha 2$ (t0, t6) $\beta 0$ (t1, t1)         t6         t3         t4 $\alpha 2$ (t0, t6) $\beta 0$ (t1, t1)           AND D $\alpha 2$ (t0, t6) $\beta 0$ (t1, t1)         t6         t8         t4 $\alpha 2$ (t0, t6) $\beta 0$ (t1, t1) $\alpha 2$ (t0, t6) $\beta 0$ (t1, t1)         t6         t8         t9 $\alpha 2$ (t0, t6) $\beta 0$ (t1, t1)	AND B $\alpha 2$ (t0, t6) $\beta 0$ (t1, t1)         t2         t3         t4 $\alpha 2$ (t0, t6) $\beta 0$ (t1, t1)           AND C $\alpha 2$ (t0, t6) $\beta 0$ (t1, t1)         t6         t3         t4 $\alpha 2$ (t0, t6) $\beta 0$ (t1, t1)           AND D $\alpha 2$ (t0, t6) $\beta 0$ (t1, t1)         t6         t8         t4 $\alpha 2$ (t0, t6) $\beta 0$ (t1, t1) $\alpha 2$ (t0, t6) $\beta 0$ (t1, t1)         t6         t8         t9 $\alpha 2$ (t0, t6) $\beta 0$ (t1, t1)	AND B $\alpha 2$ (t0, t6) $\beta 0$ (t1, t1)         t2         t3         t4 $\alpha 2$ (t0, t6) $\beta 0$ (t1, t1)           AND C $\alpha 2$ (t0, t6) $\beta 0$ (t1, t1)         t6         t3         t4 $\alpha 2$ (t0, t6) $\beta 0$ (t1, t1)           AND D $\alpha 2$ (t0, t6) $\beta 0$ (t1, t1)         t6         t8         t4 $\alpha 2$ (t0, t6) $\beta 0$ (t1, t1) $\alpha 2$ (t0, t6) $\beta 0$ (t1, t1)         t6         t8         t9 $\alpha 2$ (t0, t6) $\beta 0$ (t1, t1)	AND B $\alpha 2 (t0, t6)$ $\beta 0 (t1, t1)$ $t2$ $t3$ $t4$ $\alpha 2 (t0, t6)$ $\beta 0 (t1, t1)$ $\alpha 1 (t0, t5)$ $\beta 0 (t1, t1)$ $\alpha 0 (t0, t0)$ AND D $\alpha 2 (t0, t6)$ $\beta 0 (t1, t1)$ $\alpha 2 (t0, t6)$ $\alpha $

FIG. 14

